

ICSBEP Benchmark Evaluation Prioritization Process

A small group of criticality safety, integral measurement, and nuclear data experts meets annually in conjunction with the November Nuclear Data Advisory Group (NDAG) Meeting to review available experimental data and, based on community needs, set future benchmark priorities. Each year the group plans and prioritizes U.S. funded benchmarks for the next five year cycle. Members of this group are: J. Blair Briggs (INL), Richard D. McKnight (ANL), David P. Heinrichs (LLNL), Calvin M. Hopper (ORNL), Michael L. Zerkle (BAPL), A. Nichole Ellis (Ellis Nuclear Engineering, LLC), and James R. Felty (SAIC).

Specific data that are relevant to criticality safety applications are considered “high-priority” and are included in the plan if they

- Fill immediate criticality safety needs,
- Fill gaps in the ICSBEP integral benchmark database,
- Are in danger of being lost,
- Are recently generated U.S. funded data (including data from outside the U.S.),
- Continue or enhance foreign collaboration,
- Are expected to be of benchmark quality, or
- Maintain U.S. capability by fostering next-generation participation.

The result of this effort, a prioritized list of benchmarks, is given in Appendix C of the United States Department of Energy Nuclear Criticality Safety Program Five-Year Execution Plan. The actual number of benchmarks to be evaluated each year will depend on the cost of each evaluation and the available funding. The prioritization process is now an integral part of the ICSBEP planning effort.

End-users may request the ICSBEP to evaluate specific experimental data and create a standard benchmark report by accessing the ICSBEP Internet Site (<http://icsbep.inl.gov/>) and selecting the “Request for Evaluation” link on the left-hand side of the page. Requests will be evaluated according to the above specified criteria.